

SUMMARY OF RESULTS

The Coastal Plain of southeastern North Carolina is a critical part of one of the most biologically diverse regions along the Atlantic Coast north of Florida. The area from Carteret County in North Carolina to Georgetown County in South Carolina, and extending inland to the Sandhills Region of both states, is a center of species diversity, with many plants and animals not found elsewhere. This region is known as the Cape Fear Arch (Figure 4). The Arch forms a direct link between the ecosystems of the interior Sandhills Region and those of the central and outer Coastal Plain. In North Carolina, the core of the Arch and its biological diversity extends from Onslow to Brunswick counties, then inland through Bladen and Cumberland counties to the Sandhills Region. Duplin County lies along the edge of this core, but its contribution to the biological diversity of the Arch is limited by the extent and kind of natural habitats that remain.

Most of the natural habitat remaining in Duplin County is found in the river and stream floodplains, and in Angola Bay. There has been logging and conversion to other uses of some floodplain habitat along waterways, but this habitat is extensive along Northeast Cape Fear River and a major tributary, Goshen Swamp. Also, much of the logged habitat has been allowed to naturally regenerate, allowing recovery and continuation of natural processes. Mature forests are also present in these floodplain habitats. They are dominated by hardwoods or by hardwoods and cypress. These forests are subject to periodic flooding and naturally experience fire only rarely or not at all. Three of the seven natural areas documented in the county are found along these waterways. Two other natural areas are associated with Angola Bay, where more than 10 square miles of natural habitat occurs in Duplin County. Due to the depth and saturation of the organic soils, the large central basin has not been converted to other uses. It supports an extensive area of pocosin communities with nearly impenetrable shrub layers beneath a sparse to dense canopy of pond pine. The remaining two natural areas are isolated sites of county significance and are discussed with the others in subsequent sections.

NATURAL AREAS

A natural area is defined as an area containing one-to-several exemplary natural communities and/or exceptional plant or animal populations that form a distinct geographical unit, the boundary of which can be natural, such as a watershed, or artificial, such as a road network. Natural areas are referred to in this report as “standard sites,” “macrosites,” or “megasites.” Standard sites, usually referred to as “sites,” can range in size from one to thousands of acres and tend to have good natural integrity throughout. Six of the seven natural areas in Duplin County belong to this category. Frequently, sites occur in clusters with strong geographical connections and ecological relationships. Such clusters of standard sites are designated as macrosites. Larger or multiple macrosites forming a distinct geographical unit within a region are designated as megasites. Megasites can contain macrosites, and both typically contain lower quality lands that are not included in a standard site, but which provide ecologically important buffers and landscape connections. Standard sites not located within a megasite or macrosite are referred to as “stand-alone” sites. Standard sites, macrosites, and